REMARKS

This application has been carefully reviewed in view of the above-referenced Office Action, and reconsideration is requested in view of the following remarks.

Regarding all Prior Art Rejections

By way of review, the prior Office Action indicated that claims 32-34 are allowed in their present form. The Applicant would like to thank the Examiner for the indication of allowed subject matter. All remaining claims, except for claims 32-34, depend from claim 16.

The prior Office Action states "the best prior art found during examination of the present, Gitlin et al in view of Lynch et al, fails to teach and wherein the tone map designates that the first and second receivers receive the single data stream using merged time slots, and wherein the single stream of data comprises audio/video data; wherein a umber of unused carriers allocated to the control stream of data is less than a specified maximum, and wherein the specified maximum comprises approximately 10% of available carriers,". (emphasis added)

The present action now rejects claims 7, 9, 11-14, 16-17, 20-21 and 31, and indicates allowance for claims 32-34.

In Graham v. John Deere Co. of Kansas City, 383 U. S. 1 (1966), the Supreme Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in Hotchkiss v. Greenwood, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15–17. The analysis is objective:

> "Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." Id., at 17–18.

The undersigned additionally notes that per In re Kahn, 441 F. 3d 977, 988 (CA Fed. 2006), as explicitly endorsed by the Supreme Court states "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). It is further noted that MPEP2141.02 clearly requires that the claim be considered as a whole. Such consideration requires that each and every claimed feature as well as its interconnection and relationship with the other features be considered in evaluation of the differences in the claim and the prior art as required in the Graham inquiries.

In order to establish *prima facie* obviousness, it is the Patent Office's burden to consider each of the claim features and their interconnection and interrelationship and provide an articulated reasoning with rational underpinning for the obviousness of both the combination of claim features and their interrelationship to establish *prima facie* obviousness. When these principles are applied, it is submitted that the Office Action fails to meet its burden of establishing *prima facie* obviousness in this application.

Regarding claim 16, the claim recites at least "transmitting a new tone map to the first and second receivers that specifies that the first and second receivers are to receive the single data stream using the common set of carriers during one or more designated time slots." The Office Action admits on page 3 that the Gitlin et al reference does not disclose or teach this feature of claim 16, and looks to the Lynch et al reference to remedy this lack of teaching. The Office Action seems to assert that this feature is disclosed by the Lynch et al reference in lines 1-5 of paragraph [0057], however, it is not.

The Lynch et al reference is directed to the serial multicast of data frames to a set of receivers utilizing a tone map in which a data frame is sent and a response is expected to determine that a data transmission is successful, or has failed, prior to the transmission of the data frame on another channel. The Lynch et al reference in Fig 5 details the process under which data frames are transmitted, and this process is described in paragraphs [0049] – [0058] of the disclosure. Claim 16 recites "transmitting a new tone map to the first and second receivers" and "that specifies that the first and second receivers are to receive a single data stream using the

common set of carriers during one or more designated time slots", neither element of which is disclosed or taught by the Lynch et al reference.

The Lynch et al reference in paragraph [0052] discloses "*Otherwise, if the frame and medium access control service 20 has retried sending the frame the predefined number of times, a delivery failure is indicated to the source of the data (step 232), and availability data relating to the proxy station is updated (step 234). The update to the proxy availability data lowers the likelihood that the proxy station will be chosen again, until a new tone map is received from the proxy station, for example*" as the means whereby the tone map is in any way changed. Using this process there is no disclosure, teaching, suggestion or articulated reasoning for the absence thereof for "transmitting a new tone map to the first and second receivers", indeed, a tone map transmission is not required by the disclosure in Lynch et al to perform the transmission of a data frame as is taught in paragraph [0051] where Lynch et al discloses "*the medium access control service 20 performs a back-off procedure (step 230), and then returns to step 212 to resend the frame.*" Even if it were, the tone map update occurs after the transmission of the data, not prior to transmission as required by the recitation of claim 16.

In addition, the Lynch et al reference discloses in paragraphs [0049] – [0058] and Figs 5 and 7 that the transmission of frame data is sent to one receiver at a time in a defined list of receivers, a response is awaited, then the frame of data is sent to the next receiver in the multicast list of receivers to whom the data frame is to be sent (see Fig 5). This is not the same as "the first and second receivers are to receive the single data stream using the common set of carriers during one or more designated time slots" as recited in claim 16. Therefore, the combination of the Gitlin et al and Lynch et al references does not provide the teaching that "transmitting a new tone map to the first and second receivers that specifies that the first and second receivers are to receive the single data stream using the common set of carriers during one or more designated time slots" is obvious. In view of this shortcoming in the rejection and failure to articulate reasoning to explain why the claims are obvious in view of a lack of such disclosure, the Office Action further fails to establish *prima facie* obviousness. For these reasons, reconsideration and allowance of claim 16 is respectfully requested.

Regarding claim 20, this claim recites "the tone map designates that the first and second receivers receive the single data stream using merged time slots." The Office Action seems to assert that this claim feature is taught by the Gitlin et al reference in Col 3, lines 7-10, however, it is not. The Gitlin et al reference does not teach or disclose "using merged time slots" to satisfy transmission requirements of clients. In fact, the Gitlin et al reference in Col 3, lines 10-15 discloses "*For higher speed users, frequency slots are usually assigned contiguously in order to optimize the design of modulation and transmission architectures (e.g. a single transmitter for higher rate users). In a variant of this embodiment, where frequency adjacency requirements can be eased, higher speed users can be assigned two or more non-contiguous time-frequency slices to further maximize spectral efficiency.*" There is a teaching for the allocation of more time-frequency slices, even if they are non-contiguous, to a high speed user. However, there is no teaching for multiple receivers to receive a single data stream as designated by a tone map, or using merged time slots as non-contiguous time-frequency slices are not merged and Gitlin et al discloses a single transmitter for higher rate users. This is in no way the same as "the tone map designates that the first and second receivers receive the single data stream using merged time slots" as recited in claim 20. Therefore, the combination of Gitlin et al and Lynch et al fails to provide the teaching to establish that the recitation in claim 20 is obvious. In view of this shortcoming in the rejection and failure to articulate a reasoning for the obviousness of the claim in the absence of the asserted teachings, the Office Action fails to establish *prima facie* obviousness. For this reason, reconsideration and allowance of claim 16 is respectfully requested.

Regarding claim 12, this claim recites "the specified maximum comprises 10% of available carriers." This recitation, in combination with claims 11 and 16 from which claim 12 depends, provides the same claim features as the recited allowable features in claim 32 and should, therefore, be allowable under the same reasoning for the allowance of claim 32 when rewritten in independent form.

Regarding claims 7, 9, 11-14, 17, 20-21, and 31, these claims each depend from independent claim 16. In view of the above, it is clear that the combination of Gitlin et al and

Lynch et al fails to provide the teachings necessary to establish *prima facie* obviousness for these claims, and the Office Action fails to articulate any reasoning to explain why the claims are obvious despite the shortcomings in the art. The dependant claims are, therefore, allowable for at least the reasons shown for claim 16. Accordingly, reconsideration and allowance are respectfully requested.

Applicant makes no admission or concessions as to the accuracy of the Office Action's positions on any other matters and reserves the right to make other arguments at a later date if appropriate, but feels that the present arguments are more than adequate to address all rejections at present.

Interview Request

In view of this communication, all claims are now believed to be in condition for allowance and such is respectfully requested at an early date. If further matters remain to be resolved, the undersigned again respectfully requests the courtesy of an interview. The undersigned can be reached at the telephone number below.

Respectfully submitted,

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